

CLAIMS

1. A heat-resistant lubricity imparting coating agent containing a polydimethylsiloxane copolymer, said polydimethylsiloxane copolymer including a long chain alkyl group having a carbon number of 12 or more.
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2. The heat-resistant lubricity imparting coating agent according to claim 1, wherein the weight ratio of said long chain alkyl group having a carbon number of 12 or more to the polydimethylsiloxane copolymer is not less than 10% by weight nor more than 42% by weight.
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3. The heat-resistant lubricity imparting coating agent according to claim 1, wherein, when manufacturing the polydimethylsiloxane copolymer, the weight ratio of a vinyl monomer containing the long chain alkyl group having a carbon number of 12 or more to the entire monomers used in a copolymerization reaction is not less than 15% by weight nor more than 55% by weight.
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4. The heat-resistant lubricity imparting coating agent according to any one of claims 1 to 3, further containing a binder made of a resin.
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5. The heat-resistant lubricity imparting coating agent according to any one of claims 1 to 4, wherein the polydimethylsiloxane copolymer is a polydimethylsiloxane graft copolymer which is obtained by copolymerization of at least the vinyl monomer containing the long chain alkyl group having a carbon number of 12 or more with a polydimethylsiloxane compound containing a polymerizable vinyl group at one end thereof.
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6. The heat-resistant lubricity imparting coating agent according to any one of claims 1 to 4, wherein the polydimethylsiloxane copolymer is a polydimethylsiloxane block copolymer which is obtained by copolymerization of at least an azo-group-containing polydimethylsiloxane amide serving as a polymerization initiator with the vinyl monomer containing the long chain alkyl group having a carbon number of 12 or more.

10 7. The heat-resistant lubricity imparting coating agent according to any one of claims 1 to 6, wherein a silicon component is contained only in molecules of the polydimethylsiloxane copolymer.

15 8. A thermal transfer recording medium, comprising:
a substrate film having the front surface and the back surface thereof;
an ink layer formed on the front surface of the substrate film; and
a heat-resistant lubricous protective layer formed on the back surface of the substrate film,
20 wherein said heat-resistant lubricous protective layer includes a polydimethylsiloxane copolymer containing a long chain alkyl group having a carbon number of 12 or more.

25 9. The thermal transfer recording medium according to claim 8, wherein the weight ratio of said long chain alkyl group having a carbon number of 12 or more to the polydimethylsiloxane copolymer is not less than 10% by weight nor more than 42% by weight.

10. The thermal transfer recording medium according to claim 8, wherein said heat-resistant lubricous protective layer is formed by applying a heat-resistant lubricity imparting coating agent containing the polydimethylsiloxane copolymer, said polydimethylsiloxane 5 copolymer being manufactured such that the weight ratio of a vinyl monomer containing the long chain alkyl group having a carbon number of 12 or more to the entire monomers used in a copolymerization reaction is not less than 15% by weight nor more than 55% by weight in manufacturing the polydimethylsiloxane 10 copolymer.

11. The thermal transfer recording medium according to any one of claims 8 to 10, wherein the heat-resistant lubricous protective layer contains a binder made of a resin.

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12. The thermal transfer recording medium according to any one of claims 8 to 11, wherein the polydimethylsiloxane copolymer is a polydimethylsiloxane graft copolymer which is obtained by copolymerization of at least the vinyl monomer containing the long 20 chain alkyl group having a carbon number of 12 or more with a polydimethylsiloxane compound containing a polymerizable vinyl group at one end thereof.

13. The thermal transfer recording medium according to any one of claims 8 to 11, wherein the polydimethylsiloxane copolymer is a polydimethylsiloxane block copolymer which is obtained by copolymerization of at least an azo-group-containing 25 polydimethylsiloxane amide serving as a polymerization initiator with

the vinyl monomer containing the long chain alkyl group having a carbon number of 12 or more.

14. The thermal transfer recording medium according to any one of
5 claims 8 to 13, wherein the heat-resistant lubricous protective layer
contains a silicon component only in molecules of the
polydimethylsiloxane copolymer.